

IN THE CLAIMS

Please cancel Claims 1-3, 6-8, and 12-14 without prejudice or disclaimer.

Claims 1-3 (cancelled).

PN  
Claim 4 (currently amended): An amplification circuit amplifying an input signal to generate an output signal, said amplification circuit comprising:  
an amplifier amplifying said input signal, wherein a gain of said amplifier changes when amplifying said input signal; and  
a component provided across an output of said amplifier, wherein an impedance of said component does not change when amplifying said input signal such that changes in an amplification factor provided by said amplification circuit are minimized when amplifying said input signal to generate said output signal,

wherein said component comprises a resistor, and  
wherein said amplifier contains a first output terminal and a second output terminal, and wherein said resistor is connected to both of said first output terminal and said second output terminal.

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The amplification circuit of claim 3, further comprising a feedback circuit across said amplifier, wherein a resistance value of said resistor is chosen using the equation:

$$G300 = (1/B300) / [1 + \{ Sc * (1 + P * Vout) + S390 \} * (1 + Q * Vout * (Sc + S390) / Hc) / (Hc * B300)],$$

wherein said resistance = (1/S390), G300 represents an amplification factor of said amplification circuit, B300 represents a feedback factor of said feedback

circuit, Sc, P, Q and Hc are determined by a manufacturing process used to implement said amplification circuit.

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Claim 5<sup>2</sup> (original): The amplification circuit of claim 4, wherein said resistor is integrated into said amplifier.

Claims 6-8 (cancelled).

3  
Claim 9<sup>3</sup> (currently amended): A device comprising:  
an amplification circuit amplifying an input signal to generate an output signal,  
said amplification circuit comprising:  
an amplifier amplifying said input signal, wherein a gain of said  
amplifier changes when amplifying said input signal; and  
a component provided across an output of said amplifier, wherein an  
impedance of said component does not change when amplifying said input  
signal such that changes in an amplification factor provided by said  
amplification circuit are minimized when amplifying said input signal to  
generate said output signal,  
wherein said component comprises a resistor,  
wherein said amplifier contains a first output terminal and a second output  
terminal, and wherein said resistor is connected to both of said first output terminal  
and said second output terminal, and

The device of claim 8, wherein said amplification circuit further comprises a feedback circuit across said amplifier, wherein a resistance value of said resistor is chosen using the equation:

$$G300 = (1/B300)/[1+\{ Sc*(1+P*Vout) + S390\}^* \\ \{1+Q*Vout*(Sc+S390)/Hc\}/(Hc*B300)],$$

wherein said resistance =  $(1/S390)$ , G300 represents an amplification factor of said amplification circuit, B300 represents a feedback factor of said feedback circuit, Sc, P, Q and Hc are determined by a manufacturing process used to implement said amplification circuit.

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Claim 10<sup>4</sup> (original): The device of claim 9, wherein said resistor is integrated into said amplifier.

Claim 11<sup>5</sup> (original): The device of claim 9, wherein said device comprises a wireless base station, said device further comprising:  
an antenna receiving an external signal;  
an analog processor processing said external signal to generate said input signal; and  
an analog to digital converter converting said output signal to a sequence of digital codes.

Claims 12-14 (cancelled).

6  
Claim 15 (currently amended): A method of implementing an amplification circuit for amplifying an input signal to generate an output signal, said method comprising:

providing an amplifier to amplify said input signal, wherein a gain of said amplifier changes when amplifying said input signal;

providing a component across an output of said amplifier, wherein an impedance of said component does not change when amplifying said input signal such that changes in an amplification factor provided by said amplification circuit are minimized when amplifying said input signal to generate said output signal,

wherein said component comprises a resistor,

wherein said amplifier contains a first output terminal and a second output terminal, and wherein said resistor is connected to both of said first output terminal and said second output terminal, and

PN  
~~The method of claim 14, further comprising a feedback circuit across said amplifier, wherein a resistance value of said resistor is chosen using the equation:~~

$$G300 = (1/B300)/[1+\{ Sc*(1+P*Vout) + S390\} * \\ \{1+Q*Vout*(Sc+S390)/Hc\}/(Hc*B300)],$$

wherein said resistance =  $(1/S390)$ , G300 represents an amplification factor of said amplification circuit, B300 represents a feedback factor of said feedback circuit, Sc, P, Q and Hc are determined by a manufacturing process used to implement said amplification circuit.